

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT				1. CONTRACT ID CODE		PAGE OF PAGES	
2. AMENDMENT/MODIFICATION NO.		3. EFFECTIVE DATE		4. REQUISITION/PURCHASE REQ. NO.		5. PROJECT NO. (If applicable)	
6. ISSUED BY		CODE		7. ADMINISTERED BY (If other than Item 6)		CODE	
8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code)				(X)		9A. AMENDMENT OF SOLICITATION NO.	
						9B. DATED (SEE ITEM 11)	
						10A. MODIFICATION OF CONTRACT/ORDER NO.	
						10B. DATED (SEE ITEM 11)	
CODE		FACILITY CODE					
11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS							
<input type="checkbox"/> The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers <input type="checkbox"/> is extended, <input type="checkbox"/> is not extended. Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment your desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.							
12. ACCOUNTING AND APPROPRIATION DATA (If required)							
13. THIS ITEM ONLY APPLIES TO MODIFICATION OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.							
CHECK ONE	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.						
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).						
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:						
	D. OTHER (Specify type of modification and authority)						
E. IMPORTANT: Contractor <input type="checkbox"/> is not, <input type="checkbox"/> is required to sign this document and return _____ copies to the issuing office.							
14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)							
15A. NAME AND TITLE OF SIGNER (Type or print)				16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)			
15B. CONTRACTOR/OFFEROR		15C. DATE SIGNED		16B. UNITED STATES OF AMERICA		16C. DATE SIGNED	
(Signature of person authorized to sign)				(Signature of Contracting Officer)			

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

1. The specifications and drawings for Invitation No. DACW64-02-B-0034, Site Improvements, Wallisville Lake, Trinity River and Tributaries, Texas, advertised 2 August 2002, and for which bids are to be opened on 4 September 2002, are hereby modified as follows:

(a) Specifications.

(1) STANDARD FORM 1442, Item 12h. - Change "5" to "2."

(2) BIDDING SCHEDULE, Pages 00010-1 Through 00010-19. - The enclosed Bidding Schedule, Pages 00010-1 through 00010-19 shall supersede that issued with this Invitation.

(3) Page 00700-15, CLAUSE 52.217-7. - In line three, after the word "within," insert "30 days after Notice to Proceed."

(4) SECTION 02770, CONCRETE WALKWAYS AND PADS. - The enclosed SECTION 02770 entitled CONCRETE WALKWAYS AND PADS shall supersede that issued with this Invitation.

(5) SECTION 02822, CHAIN-LINK FENCES AND GATES. - The enclosed new SECTION 02822 entitled CHAIN-LINK FENCES AND GATES shall be added to and become a part of this Invitation.

(6) SECTION 05500, MISCELLANEOUS METALS. - The enclosed SECTION 05500 entitled MISCELLANEOUS METALS shall supersede that issued with this Invitation.

(b) Drawings.

Drawings Nos. G-9, G-10, G-13, M-1, C-24, A-21, A-30, C-41, S-41, C-53, S-52, and S-57. - The enclosed Drawings Nos. G-9, G-10, G-13, M-1, C-24, A-21, A-30, C-41, S-41, C-53, S-52, and S-57 shall supersede those issued with this Invitation.

2. This amendment shall be attached to and become a part of the specifications.

5 Encls:

1. Bd Sched, Pgs 00010-1 thru 00010-19
2. SECTION 02770
3. SECTION 02822
4. SECTION 05500
5. Drawings Nos. G-9, G-10, G-13, M-1, C-24, A-21, A-30, C-41, S-41, C-53, S-52, and S-57

**TRINITY RIVER AND TRIBUTARIES,
TEXAS, WALLISVILLE LAKE,
SITE IMPROVEMENTS**

**BIDDING SCHEDULE
(TO BE ATTACHED TO STANDARD FORM 1442)**

Item No.	Description	Estimated Quantity	Unit	Unit Price	Estimated Amount
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SCHEDULE NO. 1

WEST SIDE FACILITY

0001	Removal of Fencing and Installation of Fencing and Gates	1	L.S.	\$_____	\$_____
0002	Concrete Walkways	1,121	L.F.	\$_____	\$_____
0003	Site Furnishings	1	L.S.	\$_____	\$_____
0004	Parking and Intersection Striping	1	L.S.	\$_____	\$_____
0005	Drinking Fountain and Maintenance Water to the Point	1	L.S.	\$_____	\$_____

PUBLIC AND GOVERNMENT LAUNCH AREA

0006	Installation of Boat Ramp at the Public Launch Area	1	L.S.	\$_____	\$_____
0007	Installation of Boat Docks at the Public Launch Area	1	L.S.	\$_____	\$_____
0008	Upper and Lower Parking Lots	1	L.S.	\$_____	\$_____

00010-1

(To Accompany Amendment No. 0001 to Invitation No. DACW64-02-B-0034)

INVITATION NO. DACW64-02-B-0034

**BIDDING SCHEDULE (CONT'D)
(TO BE ATTACHED TO STANDARD FORM 1442)**

Item No.	Description	Estimated Quantity	Unit	Unit Price	Estimated Amount
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SCHEDULE NO. 1 (CONT'D)

PUBLIC AND GOVERNMENT LAUNCH AREA (CONT'D)

0009	Concrete Walkways	1,616	L.F.	\$_____	\$_____
0010	Removal of Riprap	1	L.S.	\$_____	\$_____
0011	Pre-Engineered Restroom and Drinking Fountain	1	L.S.	\$_____	\$_____
0012	Information and Fee Collection Station	1	L.S.	\$_____	\$_____
TOTAL SCHEDULE NO. 1					\$_____

INVITATION NO. DACW64-02-B-0034

**BIDDING SCHEDULE (CONT'D)
(TO BE ATTACHED TO STANDARD FORM 1442)**

Item No.	Description	Estimated Quantity	Unit	Unit Price	Estimated Amount
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OPTION NO. 1

0013	Parking Lot at East Side Facility	1	L.S.	\$_____	\$_____
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TOTAL OPTION NO. 1 \$_____

TOTAL SCHEDULE NO. 1 AND OPTION NO. 1 \$_____

INVITATION NO. DACW64-02-B-0034

BIDDING SCHEDULE (CONT'D)
(TO BE ATTACHED TO STANDARD FORM 1442)

Item No.	Description	Estimated Quantity	Unit	Unit Price	Estimated Amount
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OPTION NO. 2

0014	Concrete Walkways at East Side Facility	1	L.S.	\$_____	\$_____
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TOTAL OPTION NO. 2 \$_____

TOTAL SCHEDULE NO. 1 AND OPTIONS NOS. 1 AND 2 \$_____

INVITATION NO. DACW64-02-B-0034

BIDDING SCHEDULE (CONT'D)
(TO BE ATTACHED TO STANDARD FORM 1442)

Item No.	Description	Estimated Quantity	Unit	Unit Price	Estimated Amount
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OPTION NO. 3

0015	Site Furnishings at East Side Facility and Public and Government Launch Area	1	L.S.	\$_____	\$_____
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TOTAL OPTION NO. 3 \$_____

TOTAL SCHEDULE NO. 1 AND OPTIONS NOS. 1, 2, AND 3 \$_____

INVITATION NO. DACW64-02-B-0034

BIDDING SCHEDULE (CONT'D)
(TO BE ATTACHED TO STANDARD FORM 1442)

Item No.	Description	Estimated Quantity	Unit	Unit Price	Estimated Amount
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OPTION NO. 4

0016	Tree Planting at East Side Facility, West Side Facility, Administrative Area, and Public and Government Launch Area	1	L.S.	\$_____	\$_____
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TOTAL OPTION NO. 4 \$_____

TOTAL SCHEDULE NO. 1 AND OPTIONS NOS. 1, 2,3 AND 4 \$_____

INVITATION NO. DACW64-02-B-0034

BIDDING SCHEDULE (CONT'D)
(TO BE ATTACHED TO STANDARD FORM 1442)

Item No.	Description	Estimated Quantity	Unit	Unit Price	Estimated Amount
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OPTION NO. 5

0017	Tainter Gate Structure to include Rain Covers, Pier Fencing, and Bridge Railing	1	L.S.	\$_____	\$_____
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TOTAL OPTION NO. 5 \$_____

TOTAL SCHEDULE NO. 1 AND OPTIONS NOS. 1, 2,3,4 AND 5 \$_____

INVITATION NO. DACW64-02-B-0034

BIDDING SCHEDULE (CONT'D)
(TO BE ATTACHED TO STANDARD FORM 1442)

Item No.	Description	Estimated Quantity	Unit	Unit Price	Estimated Amount
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OPTION NO. 6

0018	Gazebo at West Side Facility	1	L.S.	\$_____	\$_____
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TOTAL OPTION NO. 6 \$_____

TOTAL SCHEDULE NO. 1 AND OPTIONS NOS. 1, 2,3,4, 5, AND 6 \$_____

INVITATION NO. DACW64-02-B-0034

BIDDING SCHEDULE (CONT'D)
(TO BE ATTACHED TO STANDARD FORM 1442)

Item No.	Description	Estimated Quantity	Unit	Unit Price	Estimated Amount
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OPTION NO. 7

0019	Storage Shed to include Electricity and Lights to Shed at Administrative Area	1	L.S.	\$_____	\$_____
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TOTAL OPTION NO. 7 \$_____

TOTAL SCHEDULE NO. 1 AND OPTIONS NOS. 1, 2,3,4, 5, 6 AND 7 \$_____

INVITATION NO. DACW64-02-B-0034

BIDDING SCHEDULE (CONT'D)
(TO BE ATTACHED TO STANDARD FORM 1442)

Item No.	Description	Estimated Quantity	Unit	Unit Price	Estimated Amount
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OPTION NO. 8

0020	Dumpster and Fire Box Pads at Administrative Area and Public and Government Launch Area	1	L.S.	\$_____	\$_____
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TOTAL OPTION NO. 8 \$_____

TOTAL SCHEDULE NO. 1
AND OPTIONS NOS. 1, 2,3,4, 5, 6, 7, AND 8 \$_____

INVITATION NO. DACW64-02-B-0034

BIDDING SCHEDULE (CONT'D)
(TO BE ATTACHED TO STANDARD FORM 1442)

Item No.	Description	Estimated Quantity	Unit	Unit Price	Estimated Amount
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OPTION NO. 9

0021	Remote Operated Gate at Administrative Area	1	L.S.	\$_____	\$_____
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TOTAL OPTION NO. 9 \$_____

TOTAL SCHEDULE NO. 1
AND OPTIONS NOS. 1, 2,3,4, 5, 6, 7, 8, AND 9 \$_____

**BIDDING SCHEDULE (CONT'D)
(TO BE ATTACHED TO STANDARD FORM 1442)**

Item No.	Description	Estimated Quantity	Unit	Unit Price	Estimated Amount
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OPTION NO. 10

0022	Irrigation System Around Shed, Irrigation System East of Access Road and Adjacent to Restroom Area, and Irrigation System Adjacent to the "Point" at Administrative Area	1	L.S.	\$ _____	\$ _____
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TOTAL OPTION NO. 10 \$ _____

TOTAL SCHEDULE NO. 1
AND OPTIONS NOS. 1, 2,3,4, 5, 6, 7, 8, 9, AND 10 \$ _____

INVITATION NO. DACW64-02-B-0034

BIDDING SCHEDULE (CONT'D)
(TO BE ATTACHED TO STANDARD FORM 1442)

Item No.	Description	Estimated Quantity	Unit	Unit Price	Estimated Amount
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OPTION NO. 11

0023	Installation of Boat Dock at the Government Launch Area and Improvement of Access on Both Sides of the Ramp	1	L.S.	\$_____	\$_____
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TOTAL OPTION NO. 11 \$_____

TOTAL SCHEDULE NO. 1
AND OPTIONS NOS. 1, 2,3,4, 5, 6, 7, 8, 9, 10,AND 11 \$_____

INVITATION NO. DACW64-02-B-0034

BIDDING SCHEDULE (CONT'D)
(TO BE ATTACHED TO STANDARD FORM 1442)

Item No.	Description	Estimated Quantity	Unit	Unit Price	Estimated Amount
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OPTION NO. 12

0024	Fishing Pier at the Public and Government Launch Area	1	L.S.	\$_____	\$_____
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TOTAL OPTION NO. 12	\$_____
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TOTAL SCHEDULE NO. 1 AND OPTIONS NOS. 1, 2,3,4, 5, 6, 7, 8, 9, 10, 11, AND 12	\$_____
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INVITATION NO. DACW64-02-B-0034

BIDDING SCHEDULE (CONT'D)
(TO BE ATTACHED TO STANDARD FORM 1442)

Item No.	Description	Estimated Quantity	Unit	Unit Price	Estimated Amount
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OPTION NO. 13

0025	Observation Tower at the Public and Government Launch Area	1	L.S.	\$_____	\$_____
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TOTAL OPTION NO. 13 \$_____

**TOTAL SCHEDULE NO. 1 AND OPTIONS
NOS. 1, 2,3,4, 5, 6, 7, 8, 9, 10, 11, 12, AND 13** \$_____

INVITATION NO. DACW64-02-B-0034

BIDDING SCHEDULE (CONT'D)
(TO BE ATTACHED TO STANDARD FORM 1442)

Item No.	Description	Estimated Quantity	Unit	Unit Price	Estimated Amount
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OPTION NO. 14

0026	Signal System to include Bell Modification, Signal Light Modification, and Independent PA System at the Navigation Lock	1	L.S.	\$_____	\$_____
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TOTAL OPTION NO. 14 \$_____

TOTAL SCHEDULE NO. 1 AND OPTIONS
NOS. 1, 2,3,4, 5, 6, 7, 8, 9, 10, 11, 12, 13, AND 14 \$_____

INVITATION NO. DACW64-02-B-0034

BIDDING SCHEDULE (CONT'D)
(TO BE ATTACHED TO STANDARD FORM 1442)

Item No.	Description	Estimated Quantity	Unit	Unit Price	Estimated Amount
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OPTION NO. 15

0027	Signage for Dam, Navigation Lock, and Structure "A"	1	L.S.	\$_____	\$_____
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TOTAL OPTION NO. 14 \$_____

TOTAL SCHEDULE NO. 1 AND OPTIONS
NOS. 1, 2,3,4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, AND 15 \$_____

**BIDDING SCHEDULE (Cont'd)
(TO BE ATTACHED TO STANDARD FORM 1442)**

1. ARITHMETIC DISCREPANCIES (EFARS 52.214-5000).

(a) For the purpose of initial evaluation of bids, the following will be utilized in resolving arithmetic discrepancies found on the face of bidding schedule as submitted by the bidder:

- (1) Obviously misplaced decimal points will be corrected;
- (2) Discrepancy between unit price and extended price, the unit price will govern;
- (3) Apparent errors in extension of unit prices will be corrected;
- (4) Apparent errors in addition of lump-sum and extended prices will be corrected.

(b) For the purpose of bid evaluation, the Government will proceed on the assumption that the bidder intends his bid to be evaluated on the basis of the unit prices, the totals arrived at by resolution of arithmetic discrepancies as provided above and the bid will be so reflected on the abstract of bids.

(c) These correction procedures shall not be used to resolve any ambiguity concerning which bid is low.

2. MODIFICATIONS (CESWG). If a modification to a bid based on unit prices is submitted, which provides for a lump sum adjustment to the total estimated cost, the application of the lump sum adjustment of each unit price in the bid schedule must be stated. If it is not stated, the bidder agrees that the lump sum adjustment shall be applied on a pro rata basis to every unit price in the bid schedule.

3. SMALL BUSINESS AND SMALL DISADVANTAGED BUSINESS SUBCONTRACTING PLAN ((FAR 52.219-9) (See CONTRACT CLAUSES.) In reference to the above, the bidder/offeror shall take into consideration only those subcontracts which he/she will award when preparing the subcontracting plan required in FAR.

4 EVALUATION OF OPTIONS (JUL 1990) (FAR 52.217-5). Except when it is determined in accordance with FAR 17.206(b) to be in the Government's best interest, the Government will evaluate offers for award purposes by adding the total price for all options to the total price for the basic requirement. Evaluation of options will not obligate the Government to exercise the options.

INVITATION NO. DACW64-02-B-0034

BIDDING SCHEDULE (Cont'd)
(TO BE ATTACHED TO STANDARD FORM 1442)

5. **SALES TAX EXEMPTION.** If you intend seeking a sales tax exemption on this contract, please contact the Comptroller of Public Accounts at 1 800-252-5555.

SECTION TABLE OF CONTENTS**SITE WORK****SECTION 02770 - CONCRETE WALKWAYS AND PADS**

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SECTION 02770 - CONCRETE WALKWAYS AND PADS

PART 1 - GENERAL

1.1 SCOPE OF WORK. The work covered in this Section consists of concrete walks and concrete pads at picnic tables, a gazebo, and shelters. It does not address vehicular pavements or structural concrete.

1.2 QUALITY CONTROL.

1.2.1 Defects. Standing water shall be considered among defects requiring correction as well as soft spots, raveling depressions, and vegetation growing through the paving.

1.2.2 Samples. The Contractor shall prepare two (2) samples for each application specified below. Samples to be 24 inches by 24 inches, prepared on-site using cement, aggregates, sand color pigments, and water that will be used in completing the work. The Contracting Officer shall be consulted for information on the precise color and finish application.

1.2.3 Standard Broom Finish.

1.2.4 Notice to Contracting Officer: The Contracting Officer may review reinforcing and forms of each concrete pour and the Contracting Officer shall be notified 48 hours before pour.

1.2.5 Uniformity. Care shall be taken to ensure uniformity of color and finishes.

1.2.6 Weather. Concrete shall not be placed when hot weather conditions can seriously impair the quality and strength of the concrete. Temperature of the concrete at placement may not exceed 90 degrees F. During high winds or excessively low humidity conditions, at the option of the Contracting Officer, the concrete temperature may be required not to exceed 85 degrees F.

1.2.7 Relations With Other Trades. Inserts, anchors, sleeves, bolts, plates, and similar items required by other trades to be cast in concrete work shall be furnished and located by each trade. These items shall be built into forms using a method that will prevent their displacement or damage during placing of concrete.

1.3 MEASUREMENT.

1.3.1 Concrete Walkways. The quantity of concrete walkways, completed and accepted as determined by the Contracting Officer, shall be measured in linear feet.

1.3.2 Pads shall not be measured for payment.

1.4 PAYMENT.

1.4.1 Concrete Walkways. Payment for 6 feet wide concrete walkways, constructed and accepted, will be made at the contract unit price per linear foot for "Concrete Walkways."

1.4.2 Pads. No separate payment will be made for the pads and the costs in connection therewith shall be included in the applicable contract lump sum or unit prices for the items to which the material and work pertain.

PART 2 - PRODUCTS

2.1 MATERIALS.

2.1.1 Reinforcing for Concrete shall conform to the applicable materials requirements of the SECTION entitled CONCRETE BERTHING SYSTEM, except bars may be ASTM A 615, Grade 40.

2.1.2 Concrete shall be formulated with standard gray cement, using 3000 psi. Mixing and placing shall conform to the requirements of the SECTION entitled CONCRETE BERTHING SYSTEM. Unless otherwise required, use 3000 psi test Stone Aggregate Working Stress Type for walks, aprons, or steps. Concrete for paving shall also have a flexural strength of 650 psi at 28 days, and 550 psi at 7 days. The standard third point loading shall be used to test.

2.1.3 Reinforcement Mesh shall conform to ASTM A 185. Reinforcing steel bar shall conform to the requirements of ASTM A 615, Grade 60. Reinforcement detailing and placement shall conform to ACI SP-66 and ACI 318R. Size and location of reinforcing is shown.

2.1.4 Water used in mixing and curing concrete shall be fresh, clean, and free from injurious amounts of oil, acid, alkali, salt, or organic matter.

2.1.5 Porous Fill shall be bank sand or bank run gravel, 1/2-inch maximum size.

2.1.6 Curing Compound shall conform to ASTM C-309 Type II white pigmented and guaranteed not to yellow the concrete surface. Submit manufacturer's name and product literature for approval.

2.1.7 Plastic Cap shall be high density polyethylene tubes in 1/2- and 3/4-inch diameter. WMC Products Inc., Series F Plastic Dowel Tubes or approved equal.

2.1.8 Cork Filler shall conform to ASTM D 1752, Type II and shall be a resilient board formed of cork particles bonded together and molded under heat and pressure in thickness required by joint width and width required by concrete thickness. Acceptable manufacturers include the following or approved equal:

Burke - Cork Expansion Joint
A.C. Horn Inc. - Cork Expansion Joint
W.R. Meadows, Inc. - Cork Expansion Joint Filler

2.1.9 Joint Sealant shall be a cold compound - A two-component polyurethane type cold-applied compound conforming to Federal Specification TT-S-227, Type 1 with primer recommended by the manufacturer for surfaces involved. Acceptable manufacturers include the following or approved equal:

Dow Corning 888-SL
Tremco, Inc. - THC-900; or approved equal

PART 3 - EXECUTION

3.1 SUB-GRADE. The subgrade shall be inspected for proper compaction, cross-section and grade. Prompt notice of unsatisfactory conditions shall be submitted. implies acceptance of the subgrade as satisfactory and later claims to the contrary shall not relieve the Contractor from full responsibility for repair or replacement of paving that is defective.

3.2 FORMS AND JOINTS.

3.2.1 Standards. Unless otherwise specified, standards shall conform to ACI 316 Chapters 1, 2, 4, 5, 6, 10, 11, 12, 13 and 14.

3.2.2 Forms. Wood side forms shall be composed of clean S4S lumber, Depth of form shall equal thickness of the concrete. Provide two (2) side stakes at joints and an intermediate side stake at 6feet on center.

3.2.2.1 Erection. Forms shall be erected on compacted subgrade that has been cut to grade to support the forms for their entire length at the required elevation. Joints shall be formed using a method that will prevent play or displacement.

3.2.3 Joints.

3.2.3.1 Control Joint shall be tooled as shown and shall be located at 6 feet on center unless indicated otherwise.

3.2.3.2 Expansion Joint shall be located as shown, as well as at abutting curbs, gutters, and vertical surfaces. Paving shall be formed against the following filler:

- (1) Sealed Joint shall be a cork filler 1/2-inch wide by full depth of the concrete. Recess filler to permit installation of sealant to the proper depth. Recesses shall be formed with removable temporary strips.
- (2) Treated Wood Joint shall be a wood filler of .40 treated Southern yellow pine boards. If surfacing is 25 feet or less in width, filler shall be composed of 2 board lengths maximum having no board shorter than 6 feet. Top shall be set level with the finished surface.
- (3) Cold Joints shall be located only as shown. Edges shall be hand tool similar to the Control Joint. Forms shall be removed.

3.2.3.3 Load Transfer Accessories. Smooth steel dowels, 1/2-inch in diameter and 24 inches long having a plastic cap at one (1) end, shall be provided. Dowels shall be spaced 12 inches on center, along the full length of the joint.

3.3 CONCRETE PLACEMENT.

3.3.1 Distribution. Concrete shall be deposited rapidly in continuous operation and shall be distributed to the required depth for entire width by machine or by hand using shovels or concrete against forms and at joints to prevent honeycombing. Ensure that each section begun can be completed with available concrete. Cold joints shall only be placed at the locations shown. Concrete shall be consolidated by an approved vibratory unit designed to vibrate the concrete internally. The vibrator shall not come in contact with side forms. Compacted concrete shall be not less than the required thickness.

3.3.1 Elevation. Concrete shall be struck off to the required elevation with sufficient excess concrete to allow for tamping. Surface shall be tamped with an approved template to compact it thoroughly and eliminate surface voids. Special care shall be taken to avoid pockets in the surface. Surface shall be screeded to the required section. The surface shall be leveled to the required grade with a longitudinal float not less than 10 feet long.

3.4 TOLERANCE FOR PAVING. A 10-foot straightedge shall be used parallel to the centerline of the area. The straightedge shall be moved sideways across the slab and advanced in stages of not more than 1/2 its length. The surface shall not vary from the straightedge by more than 1/16-inch from its nearest point of contact nor by more than 1/8-inch in any 10-foot length of pavement. Correct excess variations and refinish the area.

3.5 FINISHING CONCRETE.

3.5.1 Broom Finish: At the proper time in concrete curing, a new, stiff-bristle broom shall be pulled across the concrete surface, in the direction shown, to create a lightly textured surface with neat, even, parallel broom marks.

3.6 CURING. The surface shall be covered with curing compound in accordance with the manufacturer's recommended rates, but not less than 1 gallon per 180 square feet.

3.7 JOINT SEALANT. Where sealant is required in Expansion Joints, the joint shall be cleaned with a mechanical wire brush or other equipment as necessary to provide a satisfactory clean joint. When the joint is clean and dry and the temperature is above 50 degrees F with no fog or rain, the joint sealant shall be mixed and applied, using a cold compound, as recommended by the manufacturer to fill the joint to within 1/16-inch of the adjacent finished surface. Sealant shall be colored to match color of the adjacent concrete.

3.8 PROTECTION. Other adjacent materials, particularly curbs and gutters, shall be protected from becoming soiled by paving materials. If necessary, work shall be covered to be protected during paving operations.

3.9 CONTRACTOR QUALITY CONTROL. If the quality of materials or workmanship appears questionable, cores of the finished paving may be required to be taken and tested for density and thickness. The Contractor shall properly patch these cored areas. If the cores prove to meet specified requirements, the cost of the tests and patching the cored areas will be borne by the Government. If a sample is deficient in quality, quantity or compaction of material, the tests and patching of the cored areas shall be paid for by the Contractor. Further, deficiencies shall be corrected as directed and will be approved. Retesting of corrected work shall be paid for by the Contractor.

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SECTION 02822 - CHAIN-LINK FENCE AND GATES**PART 1 - GENERAL**

1.1 SCOPE OF WORK. The work in this Section consists of furnishing and erecting a chain-link fence and gates as specified herein and in accordance with the details and in conformity with the lines and grades as shown.

1.2 REFERENCES. The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by the basic designation only.

American Society for Testing and Materials (ASTM) Publications.

A 120-	Pipe, Steel, Hot-Dipped Zinc-Coated (Galvanized) Welded and Seamless, for Ordinary uses
A 121-	Zinc-Coated (Galvanized) Steel Barbed Wire
A 123-	Zinc (Hot Galvanized) Coatings on Products Fabricated from Rolled, Pressed, and Forged Steel Shapes, Plates, Bars and Strip
A 153-	Zinc Coating (Hot-Dip) on Iron and Steel Hardware
A 392-	Zinc Coated Steel Chain-Link Fence Fabric
A 491-	Aluminum-Coated Steel Chain-Link Fence Fabric
A 569-	Steel Carbon (0.15 Maximum, Percent) Hot-Rolled Sheet and Strip, Commercial Quality
A 570-	Hot-Rolled Carbon Steel Sheet and Strip Structural Quality
A 572-	High-Strength Low-Alloy Columbium-Vanadium Steels of Structural Quality
A 585-	Aluminum-Coated Steel Barbed Wire

B 211-	Aluminum-Alloy Bar, Rod, and Wire
B 221-	Aluminum-Alloy Extruded Bars, Rods, Wire Shapes and Tubes
F 567-	Installation of Chain-Link Fence
F 626-	Fence Fittings
F 668-	Poly(Vinyl Chloride) (PVC) - Coated Steel Chain-Link Fence Fabric
F 669	Strength Requirements of Metal Posts and Rails for Industrial Chain-Link Fence.

Chain-Link Fence Manufacturers Institute (CLEMI) Product Manual.

Federal Specifications (Fed. Spec.).

RR-F-191S	Fencing, Wire and Post Metal
TT-P-641	Primer Coating, Zinc Dust-Zinc Oxide (For Galvanized Surfaces)

1.3 QUALITY CONTROL. The chain-link fence and gates, as complete units, shall be produced by the manufacturer or controlled by one (1) manufacturer, including erection accessories, fittings, and fastenings.

1.4 SUBMITTALS. Government approval is required for submittals with a "GA" designation; submittals having an "FIO" designation are for information only. The following shall be submitted in accordance with the SECTION entitled SUBMITTAL PROCEDURES.

1.4.1 SD-01 Data.

1.4.1.1 Materials: GA. Manufacturers literature for product specifications, installation instructions, and recommendations shall be submitted.

1.4.2 SD-13 Samples.

1.4.2.1 Coating Color: GA. Poly(Vinyl Chloride) coating color sample shall be submitted. Color shall be black.

1.4.3 SD-13 Certificates.

1.4.3.1 Test Reports: GA. Certified test reports giving results of tests of vinyl coatings shall be submitted.

1.5 MEASUREMENT shall not be made for the work specified herein.

1.6 PAYMENT. No separate payment will be made for the material and work covered herein and the costs in connection therewith, including the installation of ground rods, shall be included in the applicable contract lump sum or unit prices for the items to which the material and work pertain.

PART 2 - PRODUCTS

2.1 MATERIALS.

2.1.1 Fence Fabric shall be fabricated of 9 Gage Poly(Vinyl Chloride) (PVC) wire woven in 2-inch mesh.

2.1.2 Framework.

2.1.2.1 Posts, Rails, and Braces furnished for use in conjunction with aluminum alloy fabric shall be aluminum alloy.

2.1.2.2 Line Posts, Rails, and Braces shall be vinyl-coated steel.

- (1) Aluminum Alloy shall conform to the requirements of ASTM B 429, alloy 6063-T6, Schedule 40, for extruded pipe and tube.
- (2) Aluminum Alloy shall conform to the requirements of ASTM B 221, alloy 6063-T6, for extruded bar, shape, and tube.
- (3) Vinyl-coated Steel shall conform to the requirements of Fed. Spec. RR-F-191/3.

2.1.2.3 Dimensions of the posts, rails and braces shall be as follows:

- (1) End, corner, and pull posts shall be 2.875 inches O.D.
- (2) Line posts shall be 2.375 inches OD for fabric up to 8 feet high; 2.875 inches OD for fabric over 8 feet high.
- (3) Gate posts shall be 2.875 inches OD for gate leaf up to 6 feet wide; 4.000 inches OD for gate leaf 6 feet to 13 feet wide; 6.625 inches OD for gate leaf 13 feet to 18 feet wide, 8.625 inches OD over 18 feet wide.
- (4) Gate frame shall be 1.660 inches OD for gate leaf up to 6 feet high 8 feet or less wide; 1.900 inches OD for gate leaf over 6 feet high over 8 feet wider as specified in the Subparagraph: Aluminum Gates below.
- (5) Top rail, center rail, and post brace shall be 1 .660 inches CD.

2.1.3 Data shall be submitted signifying that materials meet the strength requirements of ASTM F 669 when directed.

2.1.4 Wire Ties and Tension Wire.

2.1.4.1 Wire fabric ties, wire ties, and tension wire for use in conjunction with a given type of fabric shall be of the same material identified with the fabric type. The tension wire shall be 7-Gage coiled spring wire coated similarly to the respective wire fabric being used. Wire fabric ties shall be hag rings, aluminum wire, not less than 9 Gage.

2.1.5 Fence Fittings shall conform to ASTM F 626, except the zinc coating weight shall be in accordance with ASTM A 153.

2.1.6 Gate Hinges shall be manufacturer's standard non-lift-off type, size and material to suit gate size, offset to permit 1,800 gate openings. One and one-half (1-1/2) pairs of hinges for each leaf over 6 feet nominal height shall be provided.

2.1.7 Gate Latches shall be manufacturer's standard forked type or plunger bar type to permit operation from either side of the gate, designed with padlock eye as integral part of the latch.

2.1.8 Keepers shall be provided for the vehicle gates that automatically engage gate and hold leaves in open position until manually released.

2.1.9 Gate Stops shall be provided for double gates, consisting of mushroom type or flush plate with anchors. A locking device with padlock eye shall be included as an integral part of the latch, designed to use one (1) padlock for locking both gates leaves.

2.1.10 Aluminum Gates shall consist of aluminum alloy pipe and the fabric shall be of the same type of material as used in the fence. Gate frames shall conform as specified below.

2.1.10.1 Gate frames shall be made of 2-inch square tubing, weighing 0.97 pounds per lineal foot, welded at the corners to form a rigid one (1) piece unit. Fabric shall be securely stretched and welded in the center of the 2-inch square tubing by use of hook bolts and tension rods on the four (4) sides of the gate opening frame.

2.1.10.2 Frames shall have 3/8-inch brace rods.

2.1.10.3 A positive latch shall be provided with provisions for padlock.

2.1.10.4 Gate fittings, other than trucks, shall be galvanized malleable iron or steel.

2.1.10.5 There shall be no deflection at width openings of the gate. Maximum effort required to open or close gate shall be 25 pounds.

2.1.11 Concrete shall be Class E, 3000 psi, as specified in the SECTION entitled PORTLAND CEMENT STRUCTURAL CONCRETE FOR DOCKS. The posts shall be set in 12-inch diameter concrete piers, a minimum of 2 feet 6 inches in ground with a 6-inch concrete cover at the bottom. End, corner, pull, and walk gate posts shall be set in 18-inch diameter piers, a minimum of 4 feet 0 inches in ground with 6-inch concrete cover at bottom. The concrete shall be thoroughly compacted around post by tamping or vibrating and shall have a smooth finish slightly higher than the ground and sloped to drain away from the post.

2.1.12 Poly(Vinyl Chloride) Clad Fencing, Posts, and Accessories.

2.1.12.1 Vinyl-coated chain link fence fabric shall be No. 10 Gage core wire with a uniform square mesh measuring approximately 2 inches between parallel sides. Wire core shall be galvanized steel to which a 7-mil coating of Poly(Vinyl Chloride) PVC has been fusion bonded to produce a finished fabric size of No. 9 Gage, including PVC. Fabric shall meet the requirements of ASTM F 668, as appropriate, unless waived in writing by the Contracting Officer.

2.1.12.2 Primed steel ASTM A120 pipe and accessories shall be thermal fusion coated with PVC. The coating which has been bonded to the metal surfaces shall have a minimum thickness of 0.010-inch. The color shall match the color of the PVC coating of the fabric.

2.1.12.3 Color shall be black.

2.1.12.4 Steel parts shall be hot-dip galvanized prior to PVC coating application. Steel parts shall be PVC coated after galvanizing.

2.1.13 Barbed Wire shall be 2-strand 12-1/2 Gage aluminum coated wire with 4-point barbs and shall conform to the requirements of ASTM A 585, Class II.

2.1.14 Miscellaneous Fittings and Hardware for use with aluminum-coated steel fabric shall be of commercial grade steel or better quality, wrought or cast as appropriate to the article, and sufficient in strength to provide a balanced design when issued in conjunction with fabric posts, and wires of the quality specified herein. Miscellaneous aluminum fittings for use with aluminum alloy fabric shall be wrought or cast aluminum alloy. Barbed wire support arms shall withstand a load of 25 pounds applied vertically to the outermost end of the arm.

2.1.15 Markings. Each roll of fabric shall carry a tag showing the kind of base metal [steel, aluminum, or aluminum alloy number], kind of coating, the gage of the wire, the length of fencing in the roll, and the name of the manufacturer. Posts, wire, and other fittings shall be identified as to the manufacturer, the kind of base metal (steel, aluminum, or aluminum alloy number), and the kind of coating.

PART 3 - EXECUTION

3.1 INSTALLATION. Chain link fences and gates shall be installed in accordance with the requirements of ASTM F 567, the CLFMI Product Manual, and the manufacturer's installation instructions and recommendations. The ASTM F 567 shall be given precedence in conflicts and the Contracting Officer shall be notified in writing of conflicts.

3.1.1 Aluminum to be embedded in concrete shall be protected from direct contact with concrete by zinc chromate primer in accordance with Fed. Spec. TT-P-645.

3.1.2 Poly(Vinyl Chloride) clad surfaces shall be touched up with a compound as recommended by the manufacturer.

3.1.3 Pull Posts. Stretches of fence more than 250 feet in length shall have one (1) intermediate pull post with braces in two (2) directions for every 250 feet.

3.1.4 Posts shall be spaced 10 feet on center maximum.

3.1.5 Bolted Connections shall be tack welded.

3.1.6 Sleeved Expansion Springs shall be spaced at a distance of one (1) per five (5) top-railed butted connections.

3.1.7 Electrical Grounds shall be constructed at the locations where a power line passes over the fence at 500-foot intervals. The ground shall be installed directly below the point of crossing. The ground shall be accomplished with a copper-clad rod 8 feet long and a minimum of 5/8-inch diameter driven vertically until the top is 6 inches below the ground surface. A No. 6 solid copper conductor shall be clamped to the rod and to the fence using a method that ensures each element of the fence is grounded.

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SECTION TABLE OF CONTENTS**METALS****SECTION 05500 - MISCELLANEOUS METALS**

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SECTION 05500 - MISCELLANEOUS METALS**PART 1 - GENERAL**

1.1 SCOPE OF WORK. The work in this Section includes the miscellaneous metal items to be fabricated or supplied by the manufacturer and installed. Items include, canopies covers, and fee collection vault.

1.2 REFERENCES. The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by the basic designation only.

Aluminum Association (AA) Publications.

DAF 45-80	Designation System for Aluminum Finishes
SAA 46-78	Standards for Anodized Architectural Aluminum.

American National Standards Institute (ANSI) Publication.

A14.3-92	Safety Requirements for Fixed Ladders.
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American Society for Testing and Materials (ASTM) Publications.

A 6-94A	Rolled Structural Steel Bars, Plates, Shapes & Sheet Piling
A 36-94	Carbon Structural Steel
A 53-93A	Pipe, Steel, Black and Hot-Dipped, Zinc-coated Welded and Seamless
A 123-89A	Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products
A 153-87	Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Hardware
A 307-93	Carbon Steel, Bolts and Studs, 60,000 psi Tensile Strength
A 475-89	Zinc-Coated Steel Wire Strand

A 525-93

Steel Sheet, Zinc-Coated (Galvanized) by the Hot-Dip Process.

American Welding Society (AWS) Code.

D1.1-94

Structural Welding Code - Steel, 13th Edition.

1.3 SUBMITTALS. Government approval is required for submittals with a "GA" designation; submittals having an "FIO" designation are for information only. The following shall be submitted in accordance with the SECTION entitled SUBMITTAL PROCEDURES.

1.3.1 SD-04 Drawings.

1.3.1.1 Miscellaneous Metal Items: GA.. Shop drawings indicating material thickness, type, grade, and class; dimensions; and construction details. Drawings shall include catalog cuts, erection details, manufacturer's descriptive data and installation instructions, and templates. Shop drawings shall also be submitted for the following items: Handrails, Pipe Bollards, Bridge Barrier, Rain Canopies, and Fee Collection Vault.

1.3.2 SD-14 Samples.

1.3.2.1 Hardware or Material GA.. Samples of specific hardware or material shall be submitted as directed.

1.4 GENERAL REQUIREMENTS. The Contractor shall verify measurements and shall take field measurements necessary before fabrication. Welding to or on structural steel shall be in accordance with AWS D1.1. Hardware, including but not limited to nuts, bolts, washers, brackets, angles, or support structures, shall be of a non-corrosive material, including but not limited to, stainless, hot dipped galvanized, and aluminum. Items specified to be galvanized, when practicable and not indicated otherwise, shall be hot-dip galvanized after fabrication. Galvanizing shall be in accordance with ASTM A 525, as applicable. Exposed fastenings shall be compatible materials, shall match in color and finish, and shall harmonize with the material to which fastenings are applied. Materials and parts necessary to complete each item, even though the work is not definitely shown or specified, shall be included. Poor matching of holes for fasteners shall be cause for rejection. Fastenings shall be concealed where practicable. Thickness of metal and details of assembly and supports shall provide strength and stiffness. Joints exposed to the weather shall be formed to exclude water.

1.5 DISSIMILAR MATERIALS. Where dissimilar metals are in contact, or where aluminum is in contact with concrete, mortar, masonry, wet or pressure-treated wood, or absorptive materials subject to wetting, the surfaces shall be protected with a coat of bituminous paint or asphalt varnish.

1.6 WORKMANSHIP. Miscellaneous metalwork shall be well formed to shape and size, with sharp lines and angles and true curves. Drilling and punching shall produce clean true lines and surfaces. Welding shall be continuous along the entire area of contact except where tack welding is permitted. Exposed connections of work in place shall not be tack welded. Exposed welds shall be ground smooth. Exposed surfaces of work in place shall have a smooth finish, and unless otherwise approved, exposed riveting shall be flush. Where tight fits are required, joints shall be milled. Corner joints shall be coped or mitered, well formed, and in true alignment. Work shall be accurately set to established lines and elevations and securely fastened in place. Installation shall be in accordance with manufacturer's installation instructions and approved drawings, cuts, and details.

1.7 ANCHORAGE shall be provided where necessary for fastening miscellaneous metal items securely in place. Anchorage not otherwise specified or indicated shall include slotted inserts made to engage with the anchors, expansion shields, and power-driven fasteners when approved for concrete; toggle bolts and through bolts for masonry; machine and carriage bolts for steel; and lag bolts and screws for wood.

1.8 MEASUREMENT shall not be made for the work specified in this Section.

1.9 PAYMENT. No separate payment will be made for the work covered in this Section and the cost in connection therewith shall be included in the contract lump sum or unit prices for the item of work to which the work is incidental.

PART 2 - PRODUCTS

2.1 MATERIALS.

2.1.1 Structural Steel.

2.1.1.1 Carbon Grade Steel shall conform to ASTM A 36.

2.1.2 Structural Tubing shall conform to ASTM A 500, Grade B.

2.1.3 Steel Pipe shall conform to ASTM A 53, Type E, Grade B.

2.1.4 Carbon Steel Bolts shall conform to ASTM A 307, Grade A.

2.1.5 Carbon Steel Nuts shall conform to ASTM A 563, Grade A, Heavy Hex Style.

2.1.6 Washers. Plain washers shall conform to ASTM F 844. Other types, when required, shall conform to ASME B18.21.1, ASTM F 436, or ASTM F 959.

2.1.7 Aluminum shall conform to AA SAA-46 and AA DAF-45.

2.2 FINISHES.

2.2.1 Galvanized Steel Finishes.

2.2.1.1 Zinc Coatings shall be applied using a method and of a thickness and quality that will conform to ASTM A 123. Where zinc coatings are destroyed by cutting, welding or other causes the affected areas shall be re-galvanized. Coatings 2 ounces or heavier shall be re-galvanized with a suitable low-melting zinc base alloy similar to the recommendations of the American Hot-Dip Galvanizer's Association to the thickness and quality specified for the original zinc coating. Coatings less than 2 ounces shall be re-galvanized by a repair compound conforming to DOD-P-21035.

2.2.1.2 Shop Painting. Surfaces of ferrous metal except galvanized surfaces, shall be cleaned and shop coated with the manufacturer's standard protective coating unless otherwise specified. Surfaces of items to be embedded in concrete shall not be painted. Items to be finish painted shall be prepared according to manufacturer's recommendations or as specified.

2.2.2 Aluminum Finishes. Unless otherwise specified, aluminum items shall have an anodized finish conforming to AA SAA-46. The thickness of the coating shall be not less than that specified for protective and decorative type finishes for items used in interior locations or architectural Class I type finish for items used in exterior locations in AA DAF-45.

2.3 FABRICATION. Handrails shall be designed to resist a concentrated load of 200 pounds in any direction at any point of the top of the rail or 50 pounds per foot applied in any direction to top of the rail, whichever is more severe.

2.3.1 Steel Handrails, Including Carbon Steel Inserts. Steel handrails, including inserts in concrete, shall be steel pipe conforming to ASTM A 53. Steel railings shall be 1-1/2 inches nominal size. Railings shall be hot-dip galvanized.

2.3.2 Joint Posts, Rail, and Corners shall be fabricated by one (1) of the methods specified below.

2.3.2.1 Flush-type rail fittings of commercial standard, welded and ground smooth with railing splice locks secured with 3/8-inch hexagonal-recessed-head setscrews.

2.3.2.2 Mitered and welded joints made by fitting post to top rail and intermediate rail to post, mitering corners, groove welding joints, and grinding smooth. Butt railing splices and reinforce them by a tight fitting interior sleeve not less than 6-inches long.

2.3.2.3 Railings may be bent at corners in lieu of jointing, provided bends are made in suitable jigs and the pipe is not crushed.

2.3.3 Pipe Bollards shall be heavy duty steel pipe conforming to ASTM A 53, Type E or S, Weight STD. Pipe bollards shall be hot-dip galvanized.

2.3.4 Bridge Barrier Structure shall be galvanized steel construction. The Contractor shall field verify access door locations. Post assembly and screen panels to be shop fabricated, except as required at access door locations. Welds shall be coated with cold galvanizing paint.

2.3.4.1 Steel mesh to be 1/4-inch by No. 18 standard fabrication to provide sharp edge that is resistant to climbing. Mesh panels shall be 120 inches SWD by 48 inches LWD.

2.3.5 Miscellaneous Plates and Shapes for items that do not form a part of the structural steel framework, such as lintels, wedges, miscellaneous mountings, and frames, shall be provided to complete the work.

2.3.6 Rain Canopies shall be galvanized steel construction. The Contractor shall field verify clearances and dimensions prior to fabrication. Canopies shall be shop fabricated to the fullest extent possible. Welds shall be coated with cold galvanizing paint.

3.2.6.1 Roof panels shall be 22 Gage Galvalume "R" panels or approved equal. Panels shall be painted to match existing administration and maintenance buildings.

2.3.7 Fee Collection Vault shall be galvanized steel construction. Vault to provide secure location for deposition and storage of day use fees until collected by the Government. Three interior lock boxes shall be shop fabricated as shown.

2.3.8 Ladder Protection shall consist of a 6-foot high aluminum panel hinged at one (1) side to an aluminum plate with a locking mechanism to guard the first five (5) rungs to prevent unauthorized access.

PART 3 - EXECUTION

3.1 GENERAL REQUIREMENTS. Items shall be installed at the locations shown and according to the manufacturer's recommendations. Items specified below require additional procedures.

3.1.1 Work shall be installed plumb and level with uniform appearance. Members shall be formed to the required shape and sizes with true, straight edges, lines, and angles.

3.1.2 Galvanized Coating Repairs. Areas damaged by drilling, cutting, welding or other activities shall be coated with a neat application of cold galvanizing paint.

3.2 PIPE BOLLARDS shall be set vertically in concrete piers. Piers shall be constructed of, and the hollow cores of the pipe filled with, concrete having a minimum compressive strength of 3,000 pounds per square inch.

3.3 BRIDGE BARRIER STRUCTURE shall be installed as shown. Posts and screens shall be installed plumb and level. Field welds shall be coated with cold galvanizing paint.

3.4 HANDRAILS. Toeboards and brackets shall be installed where indicated. Splices where required, shall be made at expansion joints. Removable sections shall be installed as indicated.

3.4.1 Installation of Steel Handrails shall be in pipe sleeves embedded in concrete and the space between the post and sleeve filled with a non-shrink, non-corrosive, non-staining grout or hydraulic cement. On steel-base plates shall be bolted to stringers or structural steel framework. Rail ends shall be secured by steel pipe flanges anchored by expansion shields and bolts.

3.5 RAIN CANOPIES shall be located as shown. The final location requires approval.

3.5.1 Anchors. Covers shall be anchored to the concrete deck with Hilti Kwik Bolt expansion anchors or an approved equal.

3.5.2 Erection. Canopies shall be installed level, plumb, and true. Canopies shall not interfere with the operation or maintenance of control boxes, related conduits, or equipment on the tainter gate structure.

3.6 FEE COLLECTION VAULT shall be installed plumb and true to the lines and grades shown. Final location requires approval.

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